

Overhead Wire Clearances Information Sheet

Xcel Energy overhead wire clearances for decks, swimming pools, spas and hot tubs

If you are thinking of installing a deck, swimming pool, spa or hot tub outdoors under power wires running from your house to a wood pole, please be aware that those wires have minimum clearance requirements that must be maintained after the deck, pool or tub is installed. These clearances are the minimum necessary for electrical safety as determined by the *National Electrical Code* to prevent contact with live wires when standing on a deck or when in or around a hot tub, spa or swimming pool. You own and are responsible for all of the electrical service, including mast, meter socket, etc. The only two things XCEL owns are the overhead wires between your house and the wood pole and the electric meter. Any modification to the service is your financial responsibility and XCEL energy may have additional charges for their work with the overhead wires.

Decks

A minimum of 10 feet is required between the XCEL wires and any point on the deck directly under the wires. This may include the “drip loop” between the point where the wires attach to the house and where they loop down to go into the conduit for the service entrance to the house. This loop may be the low point of the entire run of wire and must be a minimum of 10 feet from the deck.

Swimming pools, spas and hot tubs

The XCEL Energy wires must be a minimum of 22-1/2 feet above the maximum **water level** of the pool, tub or spa. This minimum height is extended for a distance of 10 feet horizontally around the pool, spa or tub. This clearance applies only to the XCEL wires between your home and the wood pole. There are greater clearances if the pool, spa or tub is close to the higher voltage wires that may be run from pole to pole in neighborhoods.

How do I get the clearances I need?

There are 3 basic ways to get the additional clearance you need for safety:

1. **Raise the height of the service mast:** This may be possible if the additional height necessary is fairly small. XCEL may charge for moving their wires. Any mast that exceeds 48 inches above the roof will require additional support.
2. **Move the service location:** This requires, at a minimum, moving the mast to a new location so that the overhead wires will not cross within the boundaries of the restricted space above the pool, tub or spa. XCEL may charge for moving their wires.
3. **Bury the service wires:** This may be possible depending on the relative location of the pool, spa or tub and whether there is clearance to bury the wires around the edge. These buried wires still must be at least 5 feet away from the edge of the pool, spa or tub. To begin, contact XCEL Energy at 1-800-628-2121 to determine if it is feasible to bury the service conductors. XCEL does charge for the burial of the conductors.

Who can do this electrical work?

Under certain circumstances, an owner/homesteader may do their own electrical work (*please contact us for further information before proceeding*). An electrical permit is required. Moving or changing the service to a house requires shutting off all the power to the house and working with live unfused electrical wires from XCEL. If you are at all concerned about working with these live wires, please consider hiring an electrical contractor licensed with the State of Minnesota. The contractor will obtain the electrical permit and inspections as needed.

Check with Xcel for any other options or requirements.

This information is a guide to the most common questions. It is not intended, nor shall it be considered, a complete set of requirements.